

CLAIMS

1. Process for heating a material constituted at least in part by worn road coatings to be recycled, particularly
5 from milled materials or crushed agglomerates, characterized in that:

- there is heated to a first temperature with the help of first radiant heating means disposed adjacent the worn road coatings to be recycled so as to render the bitumen
10 viscous and to give rise to evaporation of water and totally to dry the materials, namely at 105 to 130°C,

- these worn road coatings to be recycled are mechanically moved during this heating step so as to present the different surfaces of these granulates and/or
15 these road coatings from milled materials, and

- there is heated to a second temperature with the help of second radiant heating means, disposed adjacent the worn road coatings to be recycled so as to bring the coating to a working temperature, namely 160 to 220°C.
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2. Process according to claim 1, characterized in that there is carried out, between the two heating steps, an agglutination of the used road coating to be recycled.

25 3. Process according to claim 1 or 2, characterized in that there are added at least additives at the outlet of the second heating step so as to regenerate the bitumen or reconstitute a new type of bitumen, by kneading.

30 4. Process according to claim 3, characterized in that there is added at least a proportion of prepared virgin granulates.

5. Device for practicing the process according to any one of the preceding claims, characterized in that it comprises at least one first chamber (10) provided with mechanical transfer means (12) and means (16) for heating of the radiant type, permitting the worn road coatings to be recycled to reach a first temperature comprised between 105 and 130°C, means for evacuating the gaseous effluents, and a second chamber (10') provided with mechanical transfer means (12') and means (16') for heating of the radiant type, permitting the worn road coatings to be recycled to reach a second temperature comprised between 160 and 220°C and means for evacuation of the gaseous effluents.

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6. Device according to claim 5, characterized in that it comprises means for agglutinating the worn road coatings to be recycled, disposed at the outlet of the first chamber (10).

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7. Device according to claim 5 or 6, characterized in that it comprises a substantially parallelepipedal chamber (10, 10') and in that the mechanical means comprise inclined and/or horizontal conveyors (12, 12') provided with means (14, 14') for vibrating and means for heating (16, 16') of the radiant type in the form of panels (18, 18').

8. Device according to claim 5 or 6, characterized in that each chamber (10, 10') comprises first and second chambers (100, 100'), which are cylindrical, coaxial, rotatable and inclined, heating means (124), the worn road

coatings to be recycled circulating in the space between the two chambers, downwardly by gravity from the top to the bottom.

- 5 9. Device according to one of claims 5 to 7, characterized in that it comprises means for treating the gaseous effluents emitted from the second chamber including the composition catalysts.